

DOKMAR MARITIME PUBLISHERS B.V.

SHIP KNOWLEDGE

SHIP DESIGN, CONSTRUCTION AND OPERATION

KLAAS VAN DOKKUM



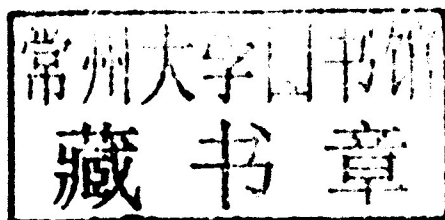
**DOK
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6TH EDITION
DOKMAR MARITIME PUBLISHERS B.V.
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6TH EDITION



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INTRODUCTION TO THE 6TH EDITION.

In preparing the 6th English edition a number of inadequacies, omissions and defects of the 5th edition have been remedied, some of the chapters have been considerably rewritten, many subjects have been improved and quite a lot of new ones have been added.

The various subjects pertaining to modern shipbuilding and seamanship as well as to present-day shipping trends and the offshore industry, are dealt with in this book in a very clear and detailed manner.

An attempt is made to give as complete an overview as possible of ships, pertinent auxiliaries, systems, rules and regulations.

The book provides a rich source of maritime information meant for all those with an interest in shipping.

It is eminently suitable for maritime students and newcomers in the field. For those employed in shipbuilding, shipping and related fields, this book is an efficient reference and convenient manual.

In order to facilitate finding a certain word or subject, an index and list of abbreviations are included at the back of the book.

The author aims at forging a strong link between the contents of the book and the views of its readers, and any reactions, recommendations or criticism are highly welcome.

On the website www.dokmar.com you will find free downloads of questions pertaining to each chapter and an explanation of the abbreviations used in this book.



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1



SHIPWISE

1

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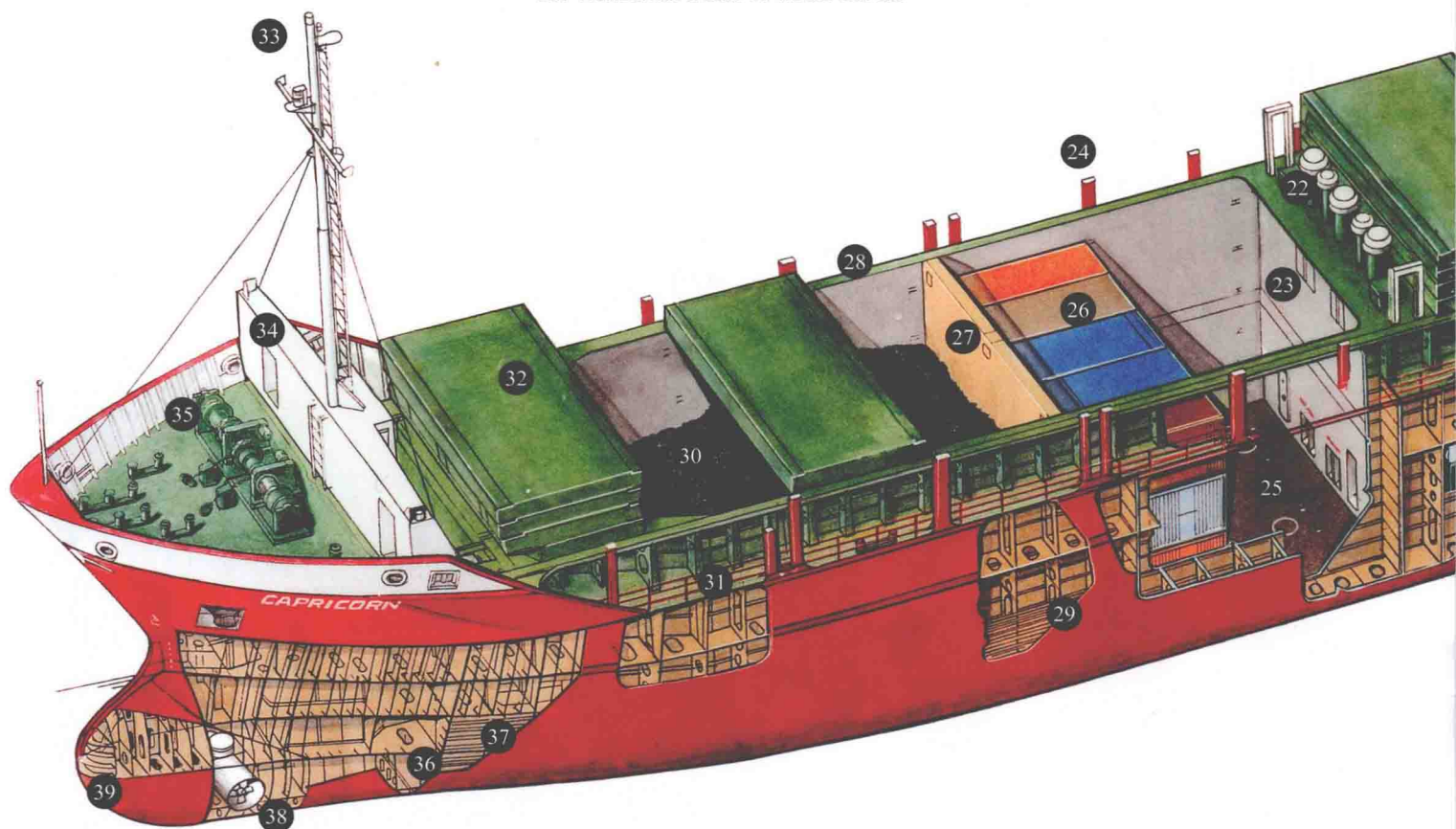
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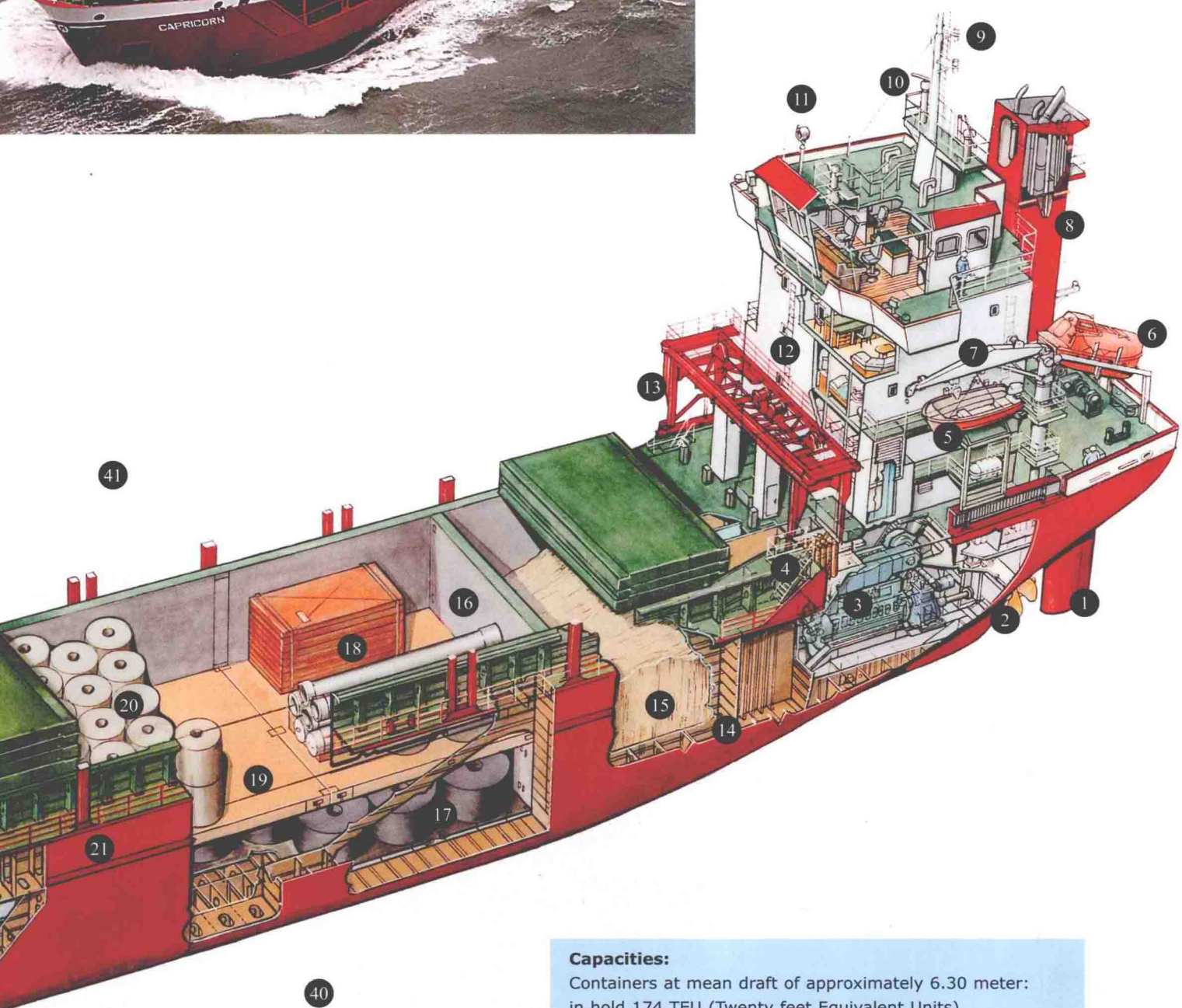
1 Introduction

This chapter shows some isometric views of ships. All visible parts and spaces are numbered and named. This is meant as an introduction to different types of ships and can be used as a reference for the following chapters.

2 Multi-purpose ship

1. Rudder
2. Propeller
3. Main engine with gearbox and shaft generator
4. CO₂ bottles in CO₂ room
5. Man overboard boat (MOB)
6. Free fall lifeboat
7. Crane for MOB, lifeboat, life raft and provisions.
8. Funnel with all exhaust pipes
9. Rear mast with navigation lights
10. Mast table with radar scanners
11. Top deck with magnetic compass and search light
12. Accommodation
13. Hatch stacking crane
14. Heavy fuel oil tank
15. Bulk cargo
16. Vertical bulkhead or pontoon
17. Heavy cargo, steel coils
18. Project cargo
19. Horizontal decks or hatch covers
20. General cargo, rolls of paper
21. Sheer strake
22. Hold fan exhausts
23. Fixed bulkhead
24. Container pedestal
25. Tank top, max. load 15 t/m²
26. Containers, 1 bay, 5 rows, 3 tiers
27. Vertical bulkhead or pontoon
28. Hatch coaming
29. Wing tank (ballast)
30. Bulk cargo
31. Gangway
32. Stacked hatches
33. Foremast with forward steaming light
34. Breakwater
35. Anchor windlass
36. Collision bulkhead
37. Deep tank
38. Bow thruster in tube
39. Bulbous bow and forepeak tank
40. Port side
41. Starboard side





Principal Dimensions:

Length overall.	118.55 meters
Length between .p.p	111.85 meters
Breadth moulded	15.20 meters
Depth	8.45 meters
Design Draft	6.30 meters
Corresponding deadweight	6600 tons
(excluding grain bulkheads/tweendeck)	

Capacities:

Containers at mean draft of approximately 6.30 meter:
in hold 174 TEU (Twenty feet Equivalent Units)
on deck 96 TEU

Tonnage Regulation (London 1969)	4900 Gross Tonnage
Grain capacity (excluding bulkheads)	328500 Cubic Feet

At a draft of 6.30 meters service speed will be 14 knots, with a shaft power of 3321 kiloWatt.

Main engine = 3840 kW / 150 kW for PTO (Power Take Off) / 90% MCR (Maximum Continuous Rating)

3 Mega Yacht

Principal particulars:

Length overall	82,00 meters
Beam max.	14,20 meters
Maximum speed	approximately 20 knots
Accommodation	1 master suite, 2 VIP and 3 twin guest cabins
Material	hull - steel, superstructure - aluminum
Engines	propulsion MTU diesels, 2 x 4680 Hp
Fuel capacity	294 m ³
Naval architects	oceAnco
Exterior design	Nuvolari & Lenard
Interior design	Nuvolari & Lenard, Alberto Pinto

1. Steering gear room
2. Garage
3. Retractable azimuth thruster
4. Reversing gearbox
5. Propulsion engine, starboard
6. Crew lounge
7. Crew mess
8. Main lobby with guest entrance
9. VIP cabin
10. Crew cabin
11. Bow thruster
12. Swimming pool with adjustable floor in top position usable as helipad or dance floor
13. Glass elevator
14. Dining room
15. Guest cabin
16. Main Saloon
17. Upper deck saloon
18. Gym and massage parlour
19. Bridge

